# Calibration Report: Pyrometer

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## Summary

Calibration Date: 22 May 2006 Next Calibration Date: 22 May 2007

A collection, analysis and calibration of data from Heitronics Pyrometer, S/N:1414 has been completed. The calibration was performed by the calibration library, Wintronics, Inc. This data was collected by Wintronics, Inc., on May 22, 2006.

MODEL: KT19.85

SERIAL NUMBER: 1414

The manufacturere's specifications of Pyrometer (S/N: 1414) have been confirmed by comparison to standards which are regularly calibrated using accepted values of natureal physical constants, ratio trype of self-calibrating techniques, comparison to standards which are traceable to National Institute of Standards and Technology (NIST), or compared to consensus standards.

APPLICATION: Add corrections to measurements per post calibration table.

### Wintronics, Inc.

50 Division Avenue Millington, NJ 07946

Phone: (908) 647-0144 Fax: (908) 647-8379

#### **Certificate of Calibration**

ANSI/NCSL Z540-1-1994

Certificate No.: J0061895

Description: Infrared Thermometer Manufacturer: Heitronics

KT19.85 Serial No: 1414 Model No:

> Customer: NASA Langley Research Center

Customer PO: Customer Asset No:

Technician: PLW Temperature: 23 Date Cal: 5/22/2006 Humidity: 48 5/22/2007 Date Due: Procedure: W60985

The manufacturer's specifications of the above instrument have been confirmed by comparison to standards which are regularly calibrated using accepted values of natural physical constants, ratio type self-calibrating techniques, comparison to standards which are traceable to NIST, or compared to consensus standards. Wintronics' calibration procedures comply with ANSI/NCSL Z540-1 & MIL-STD-45662A. Wintronics' Quality program is registered to ISO9001:2000.

As received condition: In Tolerance As shipped condition: In Tolerance

Normal Type of Calibration:

#### **Calibration Standards**

Manufacturer	Model	Description	Calibration			
			Asset #	Date	Date Due	Cert. No.
Hart Scientific	2563	Module, Thermistor	W143	8/11/2005	8/11/2006	J0057791
Hart Scientific	5610-9	Thermistor Probe	W145	4/10/2006	4/10/2007	J0061536

Peter Winter President

Certified By

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Wintronics, Inc. Calibration Report Wintronics, Inc., P.O. Box 337, Millington, NJ 07946 (908) 647-0144						
Company: NASA Lang		Mfg: Heitronics	Model: KT19.	85(-II) Date:	Date: 05/22/06	
S/N:	1414	Cust. Asset #:		Tech: PLW		
Function or Range	Nominal Value or Cal Range K	As Received	Outgoing	Tolerance	TUR	
Degrees C	0.0°C 273.15	Not Applicable	0.0 273.15	±0.71°C Same #		
	10.0°C 283.(5	Not Applicable	10.1 283,25	±0.64°C		
	20.0°C 28,15	Not Applicable	<b>20.2</b> a93.35	±0.57°C		
	30.0°C 383.5	Not Applicable	30.3 303.45	±0.50°C		
	40.0°C 33.5	Not Applicable	39.8 3/2.95	±0.57°C		
	50.0°C 333.15	Not Applicable	49.9 323.05	±0.64°C		
And the latest to the latest t	60.0°C 333.6	Not Applicable	60.1 333.25	±0.71°C		
	70.0°C 343.15	Not Applicable	70.3 343.45	±0.78°C		
	80.0°C 353.15	Not Applicable	80.3 353.45	±0.85°C		
	90.0°C 363.15	Not Applicable	90.5 363.65	±0.92°C		
	100.0°C 373.15	Not Applicable	100.5 373.65	±0.99°C		
	Cal Factor		1890	No Tolerance		
			710 11			
	weign Trough					

Additional Comments: Any Test Uncertainty Ratio (TUR) that is less than 4:1 will appear under the "TUR" heading. If the TUR meets or exceeds 4:1, the field is left blank. Standards listed used to monitor temperature of Mester ME20.03 Blackbody Calibration Source. Calibrated using lens L8AR. Ncoming data not applicable as we were unsure which lens (of three supplied) the established cal factor was for.